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| 10/555,474 | 10/02/2006 | Ralph-Dieter Maier | 1094-41 N PCT US | 4054 |
| 28349 7590 12/08/2009 DILWORTH & BARRESE, LLP 1000 WOODBURY ROAD SUITE 405 WOODBURY, NY 11797 | | | | |
| EXAMINER | | | | |
| LENIHAN, JEFFREY S | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1796 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/555,474

Applicant(s)

MAIER ET AL.

Examiner

Jeffrey Lenihan

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the amendment filed on 08/03/2009.
2. The objections and rejections not addressed below are deemed withdrawn.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 103

4. Claims 1-10, 13-22, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al, WO 02/32985 (of record).

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

5. Claims 11, 12, 23, 24, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al, WO 02/32985 (of record), as applied to claims 1 and 27 above, and further in view of Fuchs et al, US2006/0167185 (of record).

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

6. Claim 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kioka et al, US4822840 (of record).

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

7. Claims 2-10, 12, 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kioka et al, US4822840 (of record), in view of Fuchs et al, US2006/0167185 (of record).

The rejection stands per the reasons outlined in the previous Office Action, incorporated herein by reference.

Response to Arguments

8. Applicant's arguments filed 08/03/2009 have been fully considered but they are not persuasive.

9. Regarding the limitation that the ethylene content of the second component is not more than that of the first component: In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists; see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (MPEP § 2144.05). As discussed in the previous Office Action, Agarwal discloses a composition comprising 50-99.9% by weight of a first polymer comprising propylene and less than 10% by weight ethylene having a melting point (T_m) preferably greater than 115 °C and 0.1-50% by weight of a second polymer comprising propylene and ethylene having a T_m in the range of 25-110 °C and a propylene content in the range of 65-95% by weight. Barring a showing of factual evidence demonstrating unexpected results, it would therefore have been obvious to one of ordinary skill in the art to prepare a composition comprising 50-99.9% by weight

of a first propylene/ethylene copolymer characterized by a propylene content greater than 90% by weight and a T_m greater than 115 °C, corresponding to claimed component (a), and 0.1-50% by weight of a second propylene/ethylene copolymer characterized by a propylene content in the range of 65 to < 90% by weight and a T_m in the range of 25-110 °C, corresponding to claimed component (b), in full accordance with the teachings of Agarwal.

10. Applicant argues that the examiner has not provided a basis for establishing that the claimed properties of the xylene soluble fraction are inherently met by the prior art composition. The examiner first notes that independent claims 1 and 13 each recite polymer blends which "may include a fraction soluble in xylene;" the inclusion of the word "may" renders the presence of the xylene-soluble fraction optional. Similarly, independent claims 25, 26, and 27 do not require the presence of a xylene-soluble fraction having specific properties. As the independent claims do not require that said fraction is present, arguments regarding the properties of a xylene-soluble fraction are not relevant to the patentability of the independent claims.

11. Regarding the dependent claims, applicant argues that the claimed properties are dependent on 1) the catalyst used to prepare the copolymers, 2) the requirement that the propylene content of the lower melting component is less than that of the higher melting component, and 3) the amount of propylene in each component and the amount of each component in the blend (see remarks page 14 to page 15). The examiner first notes that the claims as written do not require that the propylene content of the lower melting component is less than that of the higher melting component; rather,

independent claims 1 and 13 state that the propylene content of the second component is "no more than the propylene content of the first random copolymer." The claims therefore read on compositions wherein the copolymer components have the same propylene content. Independent claims 25, 26, and 27 are silent regarding this limitation.

12. As noted in paragraph 9 of the previous Office Action, incorporated herein by reference, Agarwal discloses the use of metallocene catalysts such as $\mu\text{-(CH}_3)_2\text{Si(indenyl)}_2\text{Hf(Cl)}_2$ (Page 11, lines 3-11) which correspond to the metallocene catalyst disclosed by applicant for preparing the components of the claimed invention (see Formula I, Page 12 of the specification). Furthermore, as discussed above, Agarwal renders obvious a composition comprising first and second propylene/ethylene copolymers, wherein said first and second propylene/ethylene copolymers correspond to the claimed components (a) and (b) in terms of 1) propylene content, 2) melting points, and 3) the amount of each component in the overall composition.

13. It has been held that a chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present; see *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). As the prior art composition comprises the same components combined in similar amounts as the claimed invention, the examiner takes the position that the properties of the prior art composition would necessarily be the same as claimed and inherently be not materially different from those of the claimed invention. Applicant is therefore required to provide factual evidence

demonstrating an unobvious difference between the claimed composition and the composition rendered obvious by the prior art.

14. Regarding the rejection of claims over Kioka, applicant argues that the reference does not teach the claimed properties of the xylene soluble fraction or the claimed propylene contents of each copolymer. As noted earlier in this Action, independent claim 1 does not require the presence of said xylene soluble fraction; arguments regarding the properties of said fraction are therefore not relevant to the patentability of the independent claim. Regarding the propylene contents, as discussed in the previous Office Action, Kioka discloses a composition comprising a first copolymer containing 86 to 97% propylene and a second copolymer comprising 10 to 90% by weight propylene. Per the rationale discussed in paragraph 9 of this Office Action, it therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a composition comprising a first copolymer containing 97% propylene and a second copolymer containing 90% propylene, corresponding to claimed components (a) and (b) respectively.

15. Regarding the combination of Kioka and Fuchs; as discussed in the previous Office Action, the combination of Kioka and Fuchs renders obvious a composition comprising first and second copolymers which correspond to claimed components (a) and (b) in terms of their respective 1) melting points, 2) propylene contents, and 3) amounts in the final composition, wherein said copolymers are prepared using the same metallocene catalysts used by applicant. Per the same rationale discussed in paragraphs 11-13 of this Office Action, the examiner therefore takes the position that

the properties of the prior art composition would necessarily be the same as claimed and inherently be not materially different from those of the claimed invention. Applicant is therefore required to provide factual evidence demonstrating an unobvious difference between the claimed composition and the composition rendered obvious by the prior art.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Lenihan whose telephone number is (571)270-5452. The examiner can normally be reached on Monday through Thursday from 7:30-5:00 PM, and on alternate Fridays from 7:30-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemell/
Primary Examiner, Art Unit 1796

/Jeffrey Lenihan/
Examiner, Art Unit 1796

/JL/